BULLETIN of the
SCHOOL OF EDUCATION
INDIANA UNIVERSITY

Indiana and Midwest School Building Planning Conference: Proceedings

Vol. 33, No. 6 November, 1957

OFFICERS OF THE UNIVERSITY

HERMAN B WELLS, A.M., LL.D., President
HERMAN THOMPSON BRISCOE, Ph.D., Vice-President, and Dean of the Faculties
JOSEPH AMOS FRANKLIN, B.S., Vice-President, and Treasurer
JOHN WILLIAM ASHTON, Ph.D., LL.D., Vice-President, and Dean of Student and Educational Services
WENDELL WILLIAM WRIGHT, Ph.D., Vice-President, Dean of the School of Education, and Director of Administrative Studies and Institutional Relations
CHARLES EDWIN HARRELL, A.B., LL.B., Registrar, and Director of the Office of Records and Admissions

ADMINISTRATIVE STAFF OF THE SCHOOL OF EDUCATION

WENDELL WILLIAM WRIGHT, Ph.D., Dean
HOWARD T. BATCHELDER, Ph.D., Associate Dean
PHILIP PEAK, Ph.D., Assistant Dean
(MRS.) DOROTHY J. MCCAW, Assistant to the Dean
OTTO HUGHES, Ed.D., Principal of the University School
KATHLEEN DUGDALE, A.M., Editor of Publications in Education

ADMINISTRATIVE STAFF OF THE DIVISION OF RESEARCH AND FIELD SERVICES

HAROLD H. CHURCH, Ph.D., Director
WILLIAM H. FOX, Ph.D., Assistant Director
RUTH FAY ARGANBRIGHT, M.S. in Ed., Assistant Director
W. MONFORT BARR, Ed.D., Assistant Director of School Surveys
PAUL W. SEAGERS, Ed.D., School Building Consultant

BULLETIN OF THE SCHOOL OF EDUCATION
INDIANA UNIVERSITY

Indiana and Midwest School Building Planning Conference: Proceedings

Published by the
DIVISION OF RESEARCH AND FIELD SERVICES
Indiana University

Price, $1.00, postpaid

For sale by the Indiana University Bookstore

Bloomington, Indiana

Entered as second-class mail matter September 30, 1924, at the post office at Bloomington, Indiana, under the Act of August 24, 1912. Published in January, March, May, July, September, and November of each year, from the University Office, Bloomington, Indiana.

TABLE OF CONTENTS

	Page
INDIANA ATTITUDE TOWARD HEALTH, PHYSICAL EDUCATION, AND RECREATION, by Wilbur Young	1
IS THERE A WELFARE CORE? by Karl W. Bookwalter . . .	6
THE PROGRAM OF HEALTH AND SAFETY IN OUR SCHOOL COMMUNITY, by Donald J. Ludwig	10
THE PROGRAM OF PHYSICAL EDUCATION IN OUR SCHOOL COMMUNITY, by Virgil E. Schooler	16
RECREATION AND THE SCHOOLS, by Garrett G. Eppley . .	22
IMPLEMENTING THE PROGRAM OF HEALTH, PHYSICAL EDUCATION, AND RECREATION BY THE ADMINISTRATOR, by Paul W. Seagers	25
THE FACILITIES NEEDED FOR THE HEALTH, PHYSICAL EDUCATION, AND RECREATION PROGRAMS	
The Elementary Level, by David L. McCooe, Jr. . .	30
The Junior High School Level, by Dale E. Brock . .	33
The High School Level, Outline of speech by George P. Farkas	36
The Out-of-School Level, by Harry Davidson	39
HIGHLIGHTS OF ROUND TABLE DISCUSSION ON FACILITIES . .	42

FOREWORD

We are very happy again to present the 1957 Indiana and Midwest School Building Planning Conference Proceedings. It was extremely unfortunate that Dr. Hans Krajewski, Stadtbaudirektor of Sarbrucken, Sarr, Germany, was unable to meet this engagement with us. Nevertheless, when you read through this bulletin you will find that there is a tremendous amount of high quality thinking taking place today on the subject of health, physical education, and recreation.

We are extremely grateful to the School of Health, Physical Education, and Recreation of Indiana University for cooperating with us, not only in making the conference a success, but in providing the excellent papers which have been developed by members of their faculty and by others they have chosen. We hope that you can make good use of the materials which you will find in succeeding pages of this bulletin.

Paul W. Seagers
Conference Chairman

Program

INDIANA AND MIDWEST SCHOOL

BUILDING PLANNING CONFERENCE

1957

THEME: "Integration of School-Community Health, Physical Education, and Recreation

This conference is planned jointly with the

School of Health, Physical Education, and Recreation

•

PAUL W. SEAGERS, Conference Chairman

KARL W. BOOKWALTER, Conference Co-Chairman

WENDELL W. WRIGHT, Dean, School of Education

ARTHUR S. DANIELS, Dean, School of Health,

Physical Education, and Recreation

SCHOOL OF EDUCATION INDIANA UNIVERSITY

BLOOMINGTON, INDIANA

THURSDAY AND FRIDAY

JULY 11-12, 1957

THURSDAY MORNING, JULY 11

School of Education--University School

9:00 a.m.

Registration--Lobby, University School

10:00 a.m.

Auditorium, University School

Chairman, Otto Hughes

Welcome: Christian W. Jung
Arthur S. Daniels
Wendell W. Wright

HEALTH, PHYSICAL EDUCATION, AND RECREATION AT THE STATE LEVEL--Wilbur Young

THE COMMON CORE IN HEALTH, PHYSICAL EDUCATION, AND RECREATION--Karl W. Bookwalter

---

THURSDAY AFTERNOON, JULY 11

1:30 p.m.

Auditorium, University School

Chairman, Dale E. Brock

THE PROGRAM OF HEALTH AND SAFETY IN OUR SCHOOL COMMUNITY

Donald J. Ludwig

THE PROGRAM OF PHYSICAL EDUCATION IN OUR SCHOOL COMMUNITY

Virgil E. Schooler

THE PROGRAM OF RECREATION IN OUR SCHOOL COMMUNITY

Theodore R. Deppe

IMPLEMENTING THE PROGRAM BY THE ADMINISTRATOR

Paul W. Seagers

THURSDAY EVENING, JULY 11

8:15 p.m.

Auditorium, University School

Chairman, Paul W. Seagers

CITY PLANNING IN TERMS OF HEALTH,
PHYSICAL EDUCATION, AND RECREATION, Hans Krajewski

FRIDAY MORNING, JULY 12

9:00 a.m.

Auditorium, University School

Chairman, Virgil E. Schooler

THE FACILITIES NEEDED FOR THE HEALTH, PHYSICAL EDUCATION,
AND RECREATIONAL PROGRAMS AT DIFFERENT LEVELS

THE ELEMENTARY LEVEL, David L. McCooe, Jr.

THE JUNIOR HIGH SCHOOL LEVEL, Dale E. Brock

THE HIGH SCHOOL LEVEL, George P. Parkas

THE OUT-OF-SCHOOL LEVEL, Harry R. Davidson

FRIDAY AFTERNOON, JULY 12

1:30 p.m.

Auditorium, University School

Chairman, E. Eugene Higgins

ROUND TABLE DISCUSSION OF FACILITIES

Alex. Jardine, Edward D. James, Eugene L. Brown, Ralph Legeman,
Harold V. Maurer, Harold Silverthorn, Hans Krajewski

WHO'S WHO AMONG THE SPEAKERS

BOOKWALTER, KARL W., Professor of Physical Education, Indiana University.

BROCK, DALE E., Superintendent of Schools, Bloomington, Indiana.

BROWN, EUGENE L., Architect, Indianapolis, Indiana.

DANIELS, ARTHUR S., Dean, School of Health, Physical Education, and Recreation, Indiana University.

DAVIDSON, HARRY R., Superintendent of Schools, Battle Creek, Michigan.

DEPPE, THEODORE R., Assistant Professor of Recreation, Indiana University.

FARKAS, GEORGE P., Supervisor of Athletics and Physical Education, Indianapolis, Indiana.

HIGGINS, E. EUGENE, Lecturer, School of Education, Indiana University.

HUGHES, OTTO, Principal, University School, Bloomington, Indiana.

JAMES, EDWARD D., Architect, Indianapolis, Indiana.

JARDINE, ALEX., Superintendent of Schools, South Bend, Indiana.

JUNG, CHRISTIAN W., Director, Summer Sessions, Indiana University.

KRAJEWSKI, HANS, Stadtbaudirektor of Sarbrucken, Sarr, Germany.

LEGEMAN, RALPH, Architect, Evansville, Indiana.

LUDWIG, DONALD, Assistant Professor of Health and Safety, Indiana University.

MAURER, HAROLD V., Architect, South Bend, Indiana.

McCOOE, DAVID L., JR., Director, Health, Safety, and Physical Education, New Albany, Indiana.

SCHOOLER, VIRGIL E., Assistant Professor of Education, Indiana University.

SEAGERS, PAUL W., Professor of Education and School Building Planning Consultant, Indiana University.

SILVERTHORN, HAROLD, Director, Buildings and Properties, School City of Gary, Gary, Indiana.

WRIGHT, WENDELL W., Dean, School of Education, and Vice-President, Indiana University.

YOUNG, WILBUR, State Superintendent of Public Instruction, Indianapolis, Indiana.

INDIANA ATTITUDE TOWARD HEALTH, PHYSICAL EDUCATION, AND RECREATION

Wilbur Young

"The health of the people is really the foundation upon which their happiness and all their powers as a state depend." This is an oft repeated and trite expression, but it is just as true now as it was when the English Prime Minister, Disraeli, uttered it in 1796. Educators and our associates in public health throughout the country, and especially here in Indiana, accept this as a basic truth. We also subscribe to the definition of health, stated by the World Health organization--"health is a state of complete physical, mental, and social well-being, and not merely the absence of disease or infirmity." This concept of health is broad in nature, and when we fully grasp its scope we become sharply aware of the contribution that school programs in health education, physical education, and recreation make to total education and, consequently, to the nation's welfare.

The interest of Indiana educators and public health workers in child growth and development is not new. In fact, as early as 1911 the State Legislature passed legislation which exemplified this concern. Chapter 200, Acts of 1911, commonly referred to as the Medical Inspection Law, states:

> Section 1. Be it enacted by the general assembly of the State of Indiana, that all school trustees are herewith permitted and recommended to institute medical inspection of school children at any time, the said trustees may require teachers to annually test the sight and hearing of all school children under their charge, the said tests and uses thereof to be made according to the rules hereinafter authorized.
>
> Section 2. The term, medical inspection, as used in this act, shall be held to mean the testing of the sight and hearing of school children by school physicians for disease, disabilities, decayed teeth or other defects, which may reduce efficiency or tend to prevent their receiving full benefits of school work.
>
> Section 3, School trustees of all school corporations in this state, and all township trustees, may appoint at least one school physician for each of such school corporations or townships, as the case may be.

The law goes on to describe the procedures to be used in the examination of children, teachers, and other school personnel. It also indicates action to be taken by school authorities when health conditions are discovered that endanger the school child, and describes methods to be used in follow-up for correcting health conditions.

The 1911 law has been amended from time to time, making it possible for school authorities to employ nurse and/or school health coordinators. I should like to mention at this point, and to discuss further later, that the State Legislature saw fit, at this early date, to direct the State Board of Education and the State Board of Health to cooperate in carrying out the intent of the law.

Indiana was interested in a healthful school environment, at an early date. The Sanitary Schoolhouse Law of 1919 is indicative of this enlightened attitude. This particular law specified the type of site and location of school buildings and prescribed the construction and equipment essential to the protection of the health and safety of school children. As you well know, items covered by this legislation included space per child, color of walls, lighting, ventilation, heating, drinking water, waste disposal, and house-keeping techniques. The law also gave recognition to the importance of instruction in health matters by requiring that health be taught in the fifth grade and by approving such instruction in other grades at the will of the school authorities.

This same Sanitary Schoolhouse Law provides the legal basis upon which the physical education program of Indiana schools is founded. Section 200 states that "the State Board of Education may prescribe suitable course of instruction in physical education, in accordance with the provisions of this act, for all pupils enrolled in the private, elementary and high schools of the State, except pupils who may be excused from such training on account of physical disability, such physical disability to be determined by the health supervisor of the School Corporation, if there be a health supervisor, or by any reputable physician licensed to practice medicine in the State."

The law specifies the minimum amount of time to be devoted to physical education and requires that credit given be counted toward graduation. There are those who have contended that the physical education legislation is of a permissive nature, since it states that "the State Board of Education may prescribe suitable courses of instruction in physical education." However, I should like to point out that that law states that "it is hereby made the duty of the State Board of Education to determine when courses in physical education shall be established and where teachers of physical education shall be employed." When the State Board of Education made this determination and formalized it by an official rule, school authorities had no alternative other than to institute a program of physical education.

In addition to these basic laws concerning health and physical education, a number of laws have been passed over the years dealing with restricted areas of concern for child health. They include such subjects as: teaching the facts of narcotics, alcohol, and smoking; excluding from school those children suspected of having contagious disease; prohibiting the use of the common towel, drinking cup, and eating utensils; testing hearing; and periodic x-raying of teachers; and one law is even directed toward the prohibition of funerals in schoolhouses

of persons who die of contagious or infectious disease. I think you will have to agree that legislation relating to school health is, at least, inclusive.

I do not wish to belabor further this matter of legislation, but since bills which are enacted into law reflect the concern, hopes, and desires of our citizens, I call them to your attention and offer them as evidence that the people of Indiana have over the years demonstrated a great interest in the health and fitness of school children.

As additional evidence of this sincere interest, I would like to call to your attention certain other facts. Before a boy or girl is eligible to receive an Indiana high school diploma, he or she must have earned 16 units of credit. Eight of these units are specified, and one of these specified units is health and physical education. This is an official rule of the State Board of Education, but the Board goes further and states, "It is strongly recommended that schools offer a four-credit course covering various phases of safety, health, and physical education. These two units of credit may be accepted as meeting the requirements as one of the minors for graduation."

Although there are no specific requirements in this field at the elementary level, the Board has recommended that 10 per cent of the school day in the intermediate grades be devoted to the area of health. This includes health services, nutrition, and physical education. At the intermediate level again, 10 per cent is recommended and an additional 5 per cent of the day may be given to health with the approval of the supervisor. The recommendation for the seventh and eighth grade level is the same as for the intermediate grades. The fact that there are no requirements for health and physical education in the elementary grades does not indicate a lack of interest in this field, but reflects a philosophy held by Indiana educators. There are no state specific curriculum requirements related to the elementary grades--only recommendations which serve as guides to individual school administrators.

Indiana was among the first of the states to require the licensing of teachers of health and physical education. I understand that even now a few states do not require certification of teachers in this area. Several years ago the State Board of Education established a pattern of licensing for school nurses (teachers of health and hygiene) and more recently a pattern for teachers or leaders of recreation. In addition, certification of school physicians, psychologists, audiometric testers, various types of therapists, and other health specialists is provided for by the State Board.

I know you are aware that I have made little direct reference to recreation. There is little in school laws or Board rules that bears on this field; however, I do not believe that this indicates a lack of appreciation for this area. In all probability it results from the nature of the program and the not-too-clear understanding of the role of the school in this field. The school does provide the opportunity for the development of skills which may be utilized for recreational

purposes. The skills are not only developed in the physical education classes, but in sports programs, music classes, dramatics, science courses, and school shops.

Several months ago I appointed a committee to consult with me concerning the further development of outdoor education programs through our schools. This committee, made up of school administrators, college personnel, conservation specialists, and interested laymen, has been quite active. Several schools that had never before attempted to provide education in the out-of-doors have done so during the last school year. Bob Yoho, who serves as Chairman of this committee, reports to me that other activities are now being developed. I am certain that we can expect a great expansion in the area of outdoor education in the next few years. I assure you that it will have my wholehearted support.

Earlier in my remarks I mentioned the long history of cooperation that has existed between the State Board of Education and the State Board of Health in matters relating to school health and physical education. I would like to discuss briefly this relationship, not only because I believe that it offers further proof of Indiana's interest in this field, but also because it is an example of economy in the provision of state services.

In 1936, a joint resolution of the State Board of Health and the State Board of Education created the Division of Health and Physical Education and the director of this Division serves as liaison between the two Boards.

As a result of this arrangement, the schools of our State receive a great amount of help in the development of their programs in health and physical education. In addition, a wide variety of supplementary teaching aids is made available to teachers in the form of educational films and printed materials. I can safely say that Indiana provides more help of this nature than does any other state.

There are specific areas of cooperation between the two agencies that I should also mention. For example, the engineering staff of the State Board of Health is most helpful with problems of school sanitation. We work closely with each other in the field of speech and hearing therapy and in the area of school nursing. The school lunch program, administered by the State Department of Public Instruction, is a tremendous undertaking. The technical help of engineers, food sanitarians, and nutritionists, provided by the State Board of Health, has been of invaluable assistance in the proper operation of the program.

I know that during the course of your conference you will have specific discussions on school facilities for health, physical education, and recreation, but with your permission I would like to mention this subject briefly. I have been a part of Indiana's education program for 31 years and during this time have witnessed, from its meager beginnings, the steady progress being made under this united leadership. Almost every school in the state provides a gymnasium. It is encouraging to

note the trend of conscientious effort to plan the structures and facilities which will provide an environment for an effective health, physical education, and recreation program for every pupil. Then, too, recently interest has been demonstrated in the community school and in school facilities designed not only so that they can meet the needs of the school program, but also so that they are part of a total community plan providing for multiple usage, especially recreation.

Through the cooperation of architects, and those who are well versed in the facility and equipment requirements for health, physical education, and recreation, a mutual understanding of these needs can be developed and met. I am certain that this would assure a sound return on the school dollar.

I am convinced that Indiana is vitally concerned with the "fitness" of its school-age children. We are attempting to offer programs that:

1. Encourage adequate and continuing health guidance by qualified persons for the purpose of promoting, maintaining, and improving health.

2. Provide instruction based upon scientific information which will lead to the formation of desirable habits, attitudes, and appreciations in physical and mental health.

3. Offer opportunities for play and exercise which will provide needed physical activity and develop good muscular coordination.

4. Offer a chance to participate in a well-rounded program of recreational activities which will carry over into after-school life.

Indiana sincerely believes that such opportunities as those just related should be provided in an environment that exemplifies the best in healthful and hygienic living.

Although Indiana takes great pride in its early recognition of the importance of effective health, physical education, and recreation programs, we are not content to rest on our record of past accomplishment. We must continue to recognize that the physical, mental, and social health of the boys and girls in our state must be maintained at the highest possible level. To this end let us all continue to work together. This is imperative in order that our youth can benefit to the fullest from the outstanding total educational program of which Indiana is so proud.

IS THERE A WELFARE CORE?

Karl W. Bookwalter

What is a core program? It is a pattern of experiences and behaviors in a unified body of subject matter and/or activities fundamental to all students but adapted to individual and group needs and conducted according to the democratic process by cooperative student-teacher efforts.

It is proposed that there should be such a core program in the schools; no new subjects are called for--only a new emphasis and organization. These should integrate and unify the complementary and supplementary values presently inherent in the several functions.

There is evidence that the areas proposed in this core are but 28 per cent effective in meeting standards in our high schools. There is further evidence that, where high schools meet the standards for good programs, good pupil achievement results. Where standards are low, achievement is low.

Present Welfare Weaknesses

In the school welfare programs, as in traditional subject-matter areas, there are certain weaknesses leading to the present ineffectiveness. Subjects are in water-tight compartments and are subject-centered, witness "athletics" and "physical education." Over-departmentalization exists. The separate subjects of health, safety, driver education, first aid, and family living provide evidence of subject-matter lines drawn where integration should be. That subjects are unrelated to life is evidenced in the absence of pupil leadership, swimming programs, and carry-over activities, and in textbook health instruction. Psychologically and physiologically unsound practices are lack of variety, absence of pupil classification, failure to provide adapted or modified physical activities, and the exclusion of competitive or recreational activities except for the few. Opportunity for choice cannot exist where three or four common team games constitute the program, essentially, from the fourth to the fourteenth grade. Short periods (40 to 50 minutes, or 15 to 20 minutes in elementary schools) are made shorter still by needed hygienic and administrative duties. These periods are most commonly two days a week for one year in high schools. Little opportunity for guidance can exist where the teacher teaches three subjects to large classes and also coaches athletics. This is especially unfortunate in light of the high potential guidance opportunity in a welfare program.

Integrating Purposes of a Welfare Core

The essential remote objectives of this core could well be health, worthy use of leisure, and ethical character. The

removal of drains by health service, the removal of strains through healthful school living, the teaching of health and safety habits, and the development of organic vigor through the physical education programs, all evidence the major health possibilities in this core.

Worthy use of leisure time is fostered by participation in and appreciation of team sports, by participation in individual and dual sports, by coeducational activities, by the school emphasis upon recreation education, and by school organization of after-school and during-school youth activities.

Ethical character can be developed by athletic programs, given proper direction; by intramural opportunities for self management and participation; by guidance and counselling made possible in these and the health service programs; and, by no means least, by the selection of socially acceptable leisure-time activities which are school sponsored.

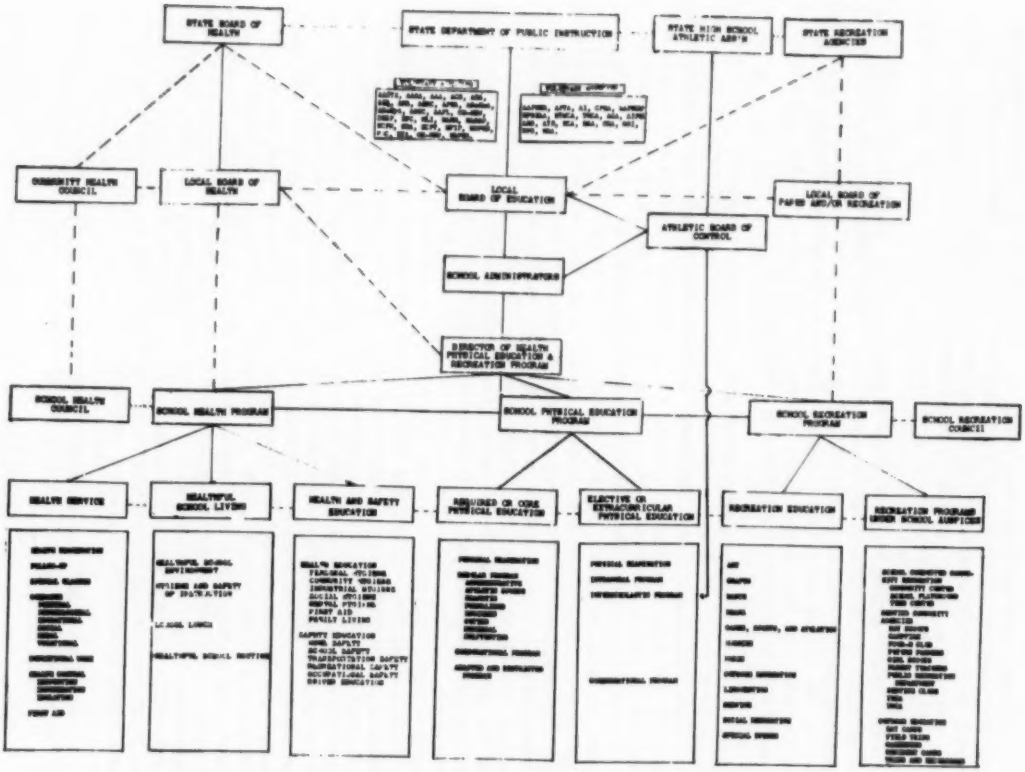
Characteristics of a Welfare Core

Basically, a core program is characterized by activities essential to all students, such as physical education, health instruction, and recreation. Department lines are cut across when class physical education, adopted remedial activities, co-recreation activities, intramurals, and interscholastic athletics are under a common head. Also health, safety, first aid, family living, and similarly related subject-matter areas can be integrated. The health services can serve all these areas. A larger block of time would of course be indispensible in order to present all these experiences properly and to care for dressing and showering and other administrative and hygienic activities.

One teacher provides for all experiences of the pupils in this core. This may mean that the health and physical education teacher needs a fifth year of professional education to familiarize him with such a comprehensive area. Group problem solving has long characterized these related areas, and by closer integration these experiences can be multiplied and enhanced. Pupil centered instruction will be made possible by pupil classification, pupil leadership, and pupil selection of activities, projects, and problems. That these welfare activities are developed around specific problems is evidenced by the present function titles; e.g., driver training, safety, family living, first aid, intramurals, and health instruction, to name a few. The obvious contribution to improved guidance and counselling has been implied above.

The Components of the Welfare Core

Since it is the function of other speakers to elaborate upon the aspects of these several programs, it suffices here to list the programs. For further detail see the accompanying organization chart.[1]



ORGANIZATION OF THE SCHOOL HEALTH, PHYSICAL EDUCATION AND RECREATION PROGRAM

Health education phase. Essential to health in the schools are health services, healthful school living, and health and safety instruction.

Physical education phase. The major aspects of a complete physical education program are the regular class instruction, the adapted-restricted-remedial program, the co-recreation program, intramural athletics, and interschool athletics.

School recreation phase. In the school recreation phase are included recreation education for the varied aspects of recreation, and school sponsored recreation programs.

Indispensibles

To implement these subprograms of the welfare core there are four indispensible factors: (1) the understanding and support of the administration, (2) well prepared and enthusiastic teachers, (3) adequate time allotment, and (4) adequate administrative, instructional-recreational, and service facilities.

Where complete integration into a welfare core is not immediately possible, great improvement can be gained by the recognition and acceptance of the several aspects above, with reasonable emphasis and provision of the indispensibles.

Selected Bibliography

Bookwalter, Karl W., Organization of the School of Health, Physical Education, and Recreation Program (multilithed chart), School of Health, Physical Education, and Recreation, Indiana University, Bloomington, 1956, 1 p.

"Physical Education Educates," The Physical Educator 14:43-44, May, 1957.

Educational Policies Commission, Education for All American Youth, National Education Association, Washington, D.C., 1944, 421 pp.

Faunce, Ronald C., and Bossing, Nelson L., Developing the Curriculum, Prentice-Hall, Inc., New York, 1951, 311 pp.

LaPorte, William Ralph, Health and Physical Education Score Card No. II (for secondary schools), Parker and Company, Los Angeles, 1951, 20 pp.

National Association of Secondary-School Principals, Fitness for Secondary School Youth, The Bulletin of the National Association of Secondary-School Principals, vol. 40, no. 218, Washington, D.C., March, 1956.

National Facilities Conference, Planning Facilities for Health, Physical Education, and Athletics, Athletic Institute, Chicago, 1956, 154 pp.

THE PROGRAM OF HEALTH AND SAFETY IN OUR SCHOOL COMMUNITY

Donald J. Ludwig

What Is a School Health and Safety Program?

During the past few years it has been my privilege to visit schools in Indiana for the purpose of promoting better school health and safety programs. These visits have revealed a general lack of understanding as to what constitutes an adequate health and safety program. It seems desirable, then, to describe the various aspects of the program, so that the concepts and practices to be discussed will have meaning.

Health has been defined by the World Health Organization as "the state of complete physical, mental, and social well-being, and not merely the absence of disease and infirmity." Note that health is a "state." Very frequently one says he teaches health. Perhaps it is better for one to say he "teaches for health"--and safety too--because it is difficult to teach a "state" of something which concerns the human body. I mention this because it indicates that teaching for health and safety implies more than the learning of basic knowledges. Attitudes and practices are equally, if not more, important.

The school health and safety program consists of the procedures that contribute to the understanding, maintenance, and improvement of the health and safety of pupils and school personnel. There are three general areas in the program: (1) health services, (2) health and safety instruction, and (3) healthful and safe school living. Health services consist of procedures for appraising the health status, health counseling, encouraging the correction of defects, controlling disease, and providing emergency care. Health and safety instruction involves the processes of providing learning experiences which favorably influence habits, attitudes, and knowledges. Healthful and safe school living is the provision of a safe and healthful environment in which to conduct the educational processes.

Organization and Administration

In the early development of school health programs the responsibility for the program rested with local boards of health, since the program consisted of a sanitary inspection of the buildings and grounds. As more was learned about the causes and prevention of diseases, doctors and nurses were brought into the schools in the early 1900's to help control diseases. Laws were also passed requiring instruction in physiology and hygiene.

As the concept of the "whole" child's being involved in the educational process became more popular and more widely accepted, the educational authorities gradually assumed the responsibility for the program as the emphasis shifted from

protection to education. It has been only within the past two decades that public health authorities have realized their opportunities to educate also, and they have created divisions of health education within their organizational structure.

Evidence indicates that the organization and administration of school health and safety programs are becoming more and more of a community concern. For example, 23 per cent of the programs in 1950 were administered jointly by the public health authorities and educational authorities, as compared with 10 per cent in 1940. There has been a corresponding reduction in the percentage of programs administered by each agency separately. Another significant trend is the increased interest and participation taken by agencies other than the public health and educational agencies in the school program. In 1950 approximately six per cent of the programs were administered by "other" agencies as compared to three per cent in 1940.

That more people are being brought into the planning of health and safety programs is evidenced by the recent development of health committees and councils. A school health committee is composed of interested people in a school building and confines its sphere of action to that building. A school health council is composed of representatives of several school buildings within a school system, and very frequently it involves people from the professional groups, voluntary and official agencies, service clubs, etc. In effect, this could become a community health council, in which case the activities of the group involve more than the school program. Health committees and councils perform in an advisory and coordinating capacity.

The Indiana legislature of 1955 passed a bill which permits school corporations of 2,500 or more pupils to employ a school health coordinator whose chief responsibility is to coordinate the health resources of the schools and communities concerned. It is hoped that this legislation will lead to better school and community relations and programs in health and safety.

School Health Services

There are accepted standards for the conduct of school health services; however, they must be adapted to the local community in the light of local customs, the variety of professional personnel and other resources that are available, and the awareness of local health needs. One of the basic functions of a health council might well be to plan and develop the policies in the area of health services.

Of paramount importance is the provision of a facility in which to carry on the health services. Standards are available for the health service unit, which should provide at least a waiting room, an evaluating room, an office area, toilet facilities, and an isolation room. The scope and extent of the health service program should determine the kind and amount of space to be provided in the unit.

Schools with 10 or more rooms or 300 or more pupils should have a waiting room, restrooms for each sex, and toilets for each sex. An evaluating room is a "must" for schools with six or more classrooms or 180 or more pupils. If hearing tests are a part of health service, an acoustically treated room should be provided. If vision testing is to be done, an uninterrupted distance of 20 feet should be provided. An adjacent classroom is desirable for use of other agencies in the conduct of well-child clinics, classes for expectant mothers, etc. In smaller communities the health unit in the school may well serve as the "hub" of community health activities.

Two additional functions of the health service are the control of communicable disease and the emergency care of the injured or suddenly ill. The philosophy regarding communicable disease should be "isolate, then diagnose." In other words, provisions should be made to isolate the "suspect" until verification can be made by a physician or the student can be referred to the parents or family physician.

At least one person adequately trained in first aid should be available at all times. Special care should be taken in establishing policies regarding the handling of emergency cases. Health personnel should have readily available the telephone number where parents can be reached, the name of the family physician, and, above all, what to do in case the parents cannot be reached.

School Health and Safety Instruction

A student graduating from an Indiana high school must have a half-unit in health and safety instruction. In this half-unit may be included driver education. The usual practice in Indiana is to teach health and safety on alternate days with physical education. The recommended time allotments are: (1) 20 minutes daily at the elementary level, and (2) a daily period for two semesters during the seventh, eighth, and ninth grades. Colleges and universities are more willing to accept for entrance credit a course in health and safety that has been taught on a semester basis. If the school curriculum desires to meet these standards, a regular classroom adequately equipped should be provided.

Health and safety instruction can make a great contribution to the understanding of community health problems, yet many schools do not avail themselves of the opportunity to use the community as a laboratory. Health and safety instruction suffers from the traditional belief that learning can take place only in a classroom. Field trips to industry, sewage disposal and water treatment plants, dairies, etc. should be made possible in every school and community. A recent study of the health interests of college students revealed that safety education and living in the community ranked twelfth and thirteenth, respectively, among the 14 areas in which interests were determined. This is a clear indication that the high school health and safety course in the schools attended by

these students did not include these areas in their content or that no use was made of the community in the instruction.

One of the best media for arousing and creating an interest in and concern for the school health and safety program is to get the pupils out into the community, so that citizens can see them at work and study. Present driver education programs are a living example. It would be desirable if schools would provide off-street practice driving areas so that the student learning to drive could gain more confidence and skill before attacking the perils of the streets and highways. High school students are also capable of conducting traffic and pedestrian surveys, home safety surveys, etc.

Healthful and Safe School Environment

Regulations which require children to attend school imply a responsibility to provide an environment conducive to optimum growth, learning, and health. A difficult problem today is that of locating schools near the center of the population to be served, yet away from dangerous traffic. Since a large number of students are transported by bus, it is necessary for the school to be ready and able to take care of them when they arrive. It is not unusual to see children waiting for a school bus at 6:45 a.m. and, in some instances, these youngsters are not permitted to enter the building before 8:00 or 8:15! They are hungry--and sleepy--by 10:00 a.m.

The size of the school site is another important factor. Statistics show that more accidents outside the building occur to school children on the playground. The activity in which most accidents occur is unorganized, or free, play. An adequate amount of space which provides for separate areas for grades and kinds of activities and apparatus is essential. Where space is limited, additional attention should be directed toward better instruction, inspection, and supervision.

Regarding the healthful environment within the building, the writer's pet peeve is the lack of concern on the part of teachers for the condition of the environment in which they teach. In a recent study it was found that the average temperature in 35 fourth grade rooms was 78 degrees. Of course, some factors in the environment cannot be altered by the teacher -- for example, the classroom in which the windows were nailed shut so that they would not rattle when the wind blew, or the school in which the custodian failed to operate the ventilating system because "he didn't want to disturb the dust."

Another factor is the emotional climate in the school. The personality of the teacher is the greatest influence in this respect. Also important are the policies regarding promotion, examinations, perfect attendance, marking, and homework assignments. If homework assignments are to be worthwhile and meaningful, I should like to make a plea for closer cooperation among the teachers so that the homework may be

accomplished. I should like to suggest that homework be assigned by departments, i.e., history this week, mathematics next week, etc., so that "Johnny is able to complete something" rather than taking the attitude, "I cannot get all of it done, so why bother to do any?"

I believe the school environment should serve as a laboratory in which students have an opportunity to put into practice the knowledges learned and the attitudes developed in the health and safety instruction. This means providing soap, water, and towels for washing purposes, shower facilities for physical education, a choice of foods in the cafeteria, and the elimination of candy and soft drink machines. In brief, the school environment very frequently has a neutralizing effect upon our health and safety instruction.

Summary

This discussion does not exhaust the subject. May I leave two thoughts with you: (1) health and safety is everybody's business--please do not permit it to be nobody's business; and (2) school health and safety is nothing more than public health and safety in a special place.

References

American Association of School Administrators, Health in Schools, American Association of School Administrators, Washington, D.C., 1951, 477 pp.

Anderson, C. L., School Health Practice, C. V. Mosby Company, St. Louis, 1956, 560 pp.

Chenoweth, Laurence B., and Selkirk, Theodore K., School Health Problems, Appleton-Century-Crofts, Inc., New York, 1953, 446 pp.

Dukelow, Donald A., "Report by the Committee on the Relation of School Health Education to Community Health Education." Journal of School Health 22:136-143, May, 1952.

Kilander, H. F., "Administrative and Personnel Aspects of School Health Services," Journal of School Health 22:155-164, June, 1952.

McVay, James R., chairman, The Community Health Council, American Medical Association, Chicago, 1949, 15 pp.

Moss, Bernice, chairman, "Report of the Committee on Terminology in Health Education," Journal of School Health 21:170-172, May, 1951.

National Facilities Conference, Planning Facilities for Health, Physical Education and Recreation, The Athletic Institute, Inc., Chicago, 1956, 154 pp.

National Safety Council, Accident Facts, 1956, National Safety Council, Chicago, 1956, 96 pp.

Seagers, Paul W., Visual Environment for Schoolrooms, Bulletin of the School of Education, vol. 26, no. 3, Indiana University, Bloomington, May, 1950.

Whiteley, William, Health Interests of College Students, unpublished doctoral dissertation, School of Health, Physical Education, and Recreation, Indiana University, Bloomington, 1957, typed.

Wilson, Charles C., chairman, School Health Services, National Education Association, Washington, D.C., 1953, 486 pp.

Suggested School Health Policies, National Education Association, Washington, D.C., 1956, 40 pp.

THE PROGRAM OF PHYSICAL EDUCATION IN OUR SCHOOL COMMUNITY

Virgil E. Schooler

An understanding of the modern accepted concepts of education and the place of the school in society is essential when planning for educational facilities. I am sure that this idea is held by all members of this conference.

The school is the institution set up by society to fulfill two major purposes: (1) to provide for the study and practice of democracy as a way of life, (2) to provide for maximum development of the individual in accordance with his needs, interests, and capacities. The school curriculmm is selected and organized in terms of these purposes. Physical education as a part of education must operate within these concepts and all activities in the program must be in accord with the all-inclusive purposes of education.

The aim of physical education is to contribute to the individual's physical, mental, and social development through appropriate vigorous total-body experiences which will afford optimum adjustment to social and hygienic standards in a dynamic democratic society.

In order to know what we hope to accomplish through a program of physical education, we need to state specifically the changes we hope to bring about in children. These changes are usually referred to as objectives or outcomes. Authorities in the field do not yet agree upon the terminology, but all generally agree as to purposes or objectives. The following have been selected as valid objectives for the modern physical education program:

1. To promote physical growth and organic development. Growth refers to the quantitative aspect of increase in size, while development refers to the qualitative aspect to acquire physical power and resistance to fatigue. Correct amounts or physical activity are an aid to proper growth but too much physical activity may stunt growth. Organic development can be required only through physical activity.

Many changes have come about in our patterns of living in the past 50 years. One of the principal factors in bringing about these changes has been industrialization and mechanization of industry. We live in a power-age. It is estimated that approximately 90 per cent of all work is done by power. Many of our jobs today are sedentary in nature. We either sit at desks or tend machines. We ride to and from work or school or even take a ride in an automobile for recreation. I have even noticed electric powered golf carts being used. We use less and less energy. We watch television; we are spectators at athletic contests rather than participants. What effect does all this have upon our organic development? Generally it adds up to the fact that our present culture does not lend itself to acquiring or maintaining good organic development.

The period of childhood and youth is the proper time for growth and development of organic power. Nash,[1] one of the most prolific writers in physical education, estimates the need for "big muscle" activity for proper growth and development to be four and one half hours per day for children of six years of age, six plus hours for children of age 12, four and one half hours for youth of age 14, three hours for youth of age 19, one and one half hours for adults of age 35, and 45 minutes for people age 50. Of course the school is not expected to provide time in the schedule for children and youth to be instructed in activities which contribute to proper growth and development.

If we are to provide for proper physical growth and organic development of children and youth, some agency must assume responsibility for providing a program and, in order to have a program, facilities are necessary.

I do hope that this conference will not recommend that we take the playgrounds away from children in order to provide a parking lot for automobiles. This is a common practice in many situations.

2. Neuro-muscular development. This refers to coordination, the ability to do physical activity without loss of motion. Although many people are born with a healthy nervous system which coordinates well, the efficiency in coordination can only be increased through activity. All of us need to increase or maintain our efficiency in motor ability, but this is especially true with children. The ages of eight to 13 years appear to be the best time for children to learn skills.

There is a close relationship between skills, strengths, and knowledge. Without a certain amount of strength and knowledge, many skills cannot be learned or executed properly. The motor ability skills of walking, running, dodging, jumping, throwing, lifting, balancing, and timing are all involved in the school program.

3. To promote intellectual development. This objective refers to thinking clearly, to using past experiences to solve problems, and to forming judgments and understandings. At one time, education was merely the training of the mind, but the present accepted theory is that in any activity the whole organism is involved. In physical education activities a person learns to anticipate, analyze, make judgments, and form conclusions in problem situations.

Athletics, games, folk dances, tumbling, as well as many other activities present many problem situations where knowledge, judgments, insights, and understandings are achieved.

---

[1]Nash, Jay B., The Administration of Physical Education, A. S. Barnes and Company, New York, 1931, p. 113.

4. Social and emotional development. Biological man was equipped by nature to live in a jungle. He has changed very little. He was not equipped to run as fast as the deer, nor does he have the strength of other animals, but he was equipped with a brain which enabled him to survive and gain control over lower animals as well as to control some of the forces of nature.

The young child represents man in his most primitive stage of development. He is ruled primarily by his emotions. As he gets older he recognizes that there are other people in the world besides himself and that he must consider others. This lesson in social behavior is difficult for him to learn. He takes on a veneer of civilization, but at times, under emotional stress, his pattern of behavior is that of a primitive man. This is not only true with children, but also with adults. Biologically, man is equipped with adrenal glands which in times of emergencies enable him to fight fiercely, to exhibit unusual speed and endurance. This is for his protection. In times of emotional stress, the glands get him ready to fight, or to run. If you need objective evidence of the functioning of these glands, observe spectators at a highly exciting athletic contest.

To be a sociably accepted person in our society, man must have organic reserve, skills, poise, confidence, and certain abilities to form judgments and control his emotions under trying situations.

5. To develop safety and recreational skills. Self preservation is one of the most basic urges within the human being. In order to survive in our complex society of industrialization and mechanization, we need to develop safety consciousness. To avoid accidents we need to learn to use our eyes, to develop quick reaction time, to develop habits based upon abstract thinking, to develop resistance to fatigue, to attain knowledge, and to acquire insights and understandings, as well as to achieve good motor skills.

Children and youth have more leisure time today than ever before. Leisure time is not necessarily a social asset. It may be a social liability. Boys and girls will find many things with which to occupy their leisure time. These activities may not be in accord with social standards or be beneficial to the individuals. Can society afford to permit or encourage children and youth to shift for themselves during their leisure hours? Physical education can and should develop favorable attitudes toward physical activity and develop recreational skills which will have carry-over value for today and in the future.

Adults, also, have need for recreation not only to occupy the increased leisure hours but also to assist in releasing emotions and tensions. With less and less activity, congested living conditions, more noise, and international conditions in a precarious situation, nervous tensions and emotional strains are apparent in adults, youth, and children. This tension and emotional disturbance is evident from the number of tranquilizer pills being used today. Unless people have a release from

these emotional tensions and nervous strains, it is predicted that there will be more and more mental patients in our institutions. These objectives are interrelated and interacting. The degree to which they are achieved determines to a great extent the degree to which a person becomes a well-rounded and socially integrated individual.

Phases of the Physical Education Program

The physical education program in a community school consists of five phases, as follows:

1. The core or required program of instruction and practice in activities planned for all normal pupils in schools. Ideally these classes should meet daily. Enrollment should seldom exceed 60 pupils, with 36 to 48 being regarded as a desirable number.

The time allocated to the various activities as recommended by the Indiana State Course of Study[2] is as follows:

Activities	Per cent in junior high		Per cent in senior high	
	Boys	Girls	Boys	Girls
Administrative	7	7	7	7
Athletic sports	30	22	32	24
Conditioning	11	11	12	9
Hygienic	28	30	28	30
Rhythms	8	16	5	18
Self testing	16	14	16	12

2. The voluntary intramural and co-recreational program of activities for most boys and girls. The trend in many of the better schools is to provide instruction in co-recreational activities during the regular core program with opportunities to participate in co-recreational activities on out-of-school time.

The intramural program consists primarily of a variety of sports and games carried on usually after school or in the evenings and weekends.

---

[2]State of Indiana, Department of Public Instruction, Physical Education, bul. no. 207, The Department, Indianapolis, 1949.

3. The interscholastic sports program in secondary schools. I would not recommend an interscholastic program for junior high school boys and girls, nor would I recommend an interscholastic program for senior high school girls. This program exists primarily for the physically superior student. Varsity teams in football, cross country, basketball, wrestling, swimming, track and field, baseball, golf, tennis, soccer, and sometimes other sports such as ice hockey are included. Boxing is taboo at all levels for all participants.

4. The adapted or remedial program for all typical pupils designed to meet the needs of each individual. These classes, by any standard, should be small, as much of the instruction is individual.

5. The adult physical education program designed to maintain physical fitness and recreational skills. This is primarily an after-school program in which the facilities are made available when not in use by the student school population. The activities involved will perhaps be those of a recreational nature. A problem arises here relative to personnel and facilities where active adult programs are in effect. In many school cities this program is administered through the school-city recreational department rather than through the physical education department of the school.

The Elementary School Program

In the elementary school program the objectives are the same; however, the emphasis and activities would be different.

The major purposes should be to help children to acquire motor ability skills, attitudes, social behavior, and a knowledge of many games which they can play during out-of-school time. The minimum daily instructional program should be at least 30 minutes in length, with two such periods of 15 to 30 minutes for primary grades.

The activities in the elementary program should be varied in nature. They should include games of low organization, modified athletic games, rhythms, singing games, stunts, and self-testing activities.

Some perplexing problems faced by the physical education profession which have implications for this workshop are:

1. Present facilities in many schools are not sufficient in number or size to accommodate the large school enrollments; consequently, class sizes are increased and a minimum program is in operation.

2. The emphasis placed upon the secondary boys' varsity program of athletics by the school and community denies participation to the many for the benefit of the few. The girls' program and intramurals in particular are being negatively affected because of the lack of sufficient facilities.

3. Facilities, personnel, and finances are insufficient to carry on an adapted or remedial program.

4. There is a lack of swimming pools in the facilities for physical education.

A summary of the general concepts follows:

1. Physical education is particularly important for proper growth and dvelopment during childhood and youth.

2. All students should be enrolled in physical education classes.

3. Driver training, musical organizations, military training, and participation in varsity athletics should not be substituted for the core program.

4. Class sizes must be such as to permit efficient instruction.

5. Facilities must be sufficient to provide for present and probable future enrollments.

6. A daily program should be provided for a period of 60 minutes.

7. The girls' program should not be sacrificed in order to carry on the boys' program.

8. Provisions should be made in the community to accommodate adult participation in physical activities.

9. The athletic program should be conducted in terms of the best educational practices and should take only its proper place in the total program.

10. Tackle football is not recommended below the ninth grade.

11. Boxing has no place in a physical education program at any level.

12. A constructive program to meet the needs of the participants is imperative.

RECREATION AND THE SCHOOLS

Garrett G. Eppley

You are in a community where excellent cooperation exists between the park and recreation department of the city and the public schools. A member of the school board serves as one of the four members of the park and recreation board. The recreation budget is derived from a school recreation tax of nine cents and a civil city recreation tax of eight and one half cents. School facilities are available for community recreation without charge. The head of the local recreation department receives approximately one third of his salary from the Department of Recreation at Indiana University. In return, he supervises the field work (student teaching) of our recreation majors.

Why should public officials give consideration to the recreation needs of their communities?

Leisure has increased. The laborer has more leisure today than he has working hours. Walter Reuther is requesting a four-day work week next year.

Editorials stress the point that the American people are not prepared for the leisure which has been given them--that the future of American civilization will depend on the use people make of their leisure.

Recreation has become a 45 billion dollar industry. The long week-end, plus holidays and paid vacations, will cause a tremendous exodus from our communities to the resort areas. Cities will become as silent as cemeteries unless positive programs are initiated. Many cities are realizing the situation and are beginning city renewal programs. Three hundred cities have established such programs. The renewal program is not the full answer to the problem.

The responsibility for recreation rests largely with the home, the school, the church, and the public and voluntary recreation agencies. The schools should prepare the children for leisure. Skills and/or appreciations should be developed in arts and crafts, music, drama, sports and games, social activities, good literature, enjoyment of nature, and community service. Students should learn to enjoy these activities and interests. For example, school camping can cause children to enjoy and want to know more about nature. Children should be caused to feel a responsibility for the activity in which they participate. Thus, they will develop an attitude of community service.

The purpose of recreation is to enrich life, to develop good citizenship, to enable each person to be worth more to his community.

To provide for adequate recreational facilities we need joint planning on the part of our schools and our park and

recreation departments. They should cooperate in the acquisition of areas and in the development of facilities. School buildings should have community use sections zoned for recreational use by the community. Policies should be established relative to community use of school facilities.

Examples of cities in which the schools and the park and recreation departments have entered into cooperative agreements are Bloomington, Evansville, and Hammond, Indiana; Detroit and Grand Rapids, Michigan; Minneapolis, Minnesota; Omaha, Nebraska; Oakland and San Francisco, California; Seattle and Spokane, Washington; Austin and Dallas, Texas; Richmond, Virginia; and Glencoe, Glenview, and Wilmette, Illinois.

Joint planning and cooperative use of recreation facilities enables the community to get the maximum use of the facilities, avoid duplication of facilities, and get the most value from the tax dollar.

Cities should meet at least the minimum standards for recreation. Some of these are:

Ten acres of parks and playgrounds for every 1,000 people.

A park and recreation budget of $6.00 per capita.

A recreation executive with a master's degree in recreation, plus experience.

Some cities have budgets equal to or above the minimum standard. Fort Wayne is an example. Because of the excellent quality of the Fort Wayne program, many recreation facilities have been donated to the city. Another example can be found in Chicago, where the current budget of the Park District is $30,000,000.

To secure the most efficient use of recreational facilities, the employment of professionally prepared persons is essential. Though Indiana University confers between 40 and 50 degrees in recreation annually, it cannot begin to meet the demand for recreation personnel.

The schools can help alleviate this shortage of recreation personnel by acquainting and encouraging potential recreation leaders to major in recreation. By so doing, the school officials render a service to their students and to their communities.

The recreation profession provides excellent opportunities and rapid advancement for any one who is interested in accepting the challenge offered by this fast growing profession.

References

Butler, George D., School Grounds Designed for Community Use, National Recreation Association, 1949.

"The School Plant as a Community Recreation Center," in The American School and University, 1951-1952, pp. 151-156, American School Publishing Co., New York, 1952.

"School-City Cooperation," Recreation 46A:34-37, April, 1953; 98-102, May, 1953; 167-170, June, 1953.

"Community Centers--Seattle Style," Recreation 40:541, March, 1952.

Everly, Robert E, "Park-School Plan," Recreation 41:192-193, July, 1947.

Kirkpatrick, Malcolm, "The Park-School as a Functional Facility," Recreation 39:286, October, 1951.

McConkey, James, "A Memorial to the Future," Planning and Civic Comment 18:29, January, 1952.

Seter, D. P., "School and Park Planned by Community are Neighborhood Assets in Appearance and Function," The Nation's Schools 50:73, October, 1952.

IMPLEMENTING THE PROGRAM OF HEALTH, PHYSICAL EDUCATION, AND RECREATION BY THE ADMINISTRATOR

Paul W. Seagers

It is not possible for any one person to know and describe all of the ways in which a good health, physical education, and recreational program can be implemented by the administrator. The best that can be done is to suggest some ways, to imply others, and to stimulate people to develop other methods. You have heard the splendid talks by the previous speakers here, who have suggested the needs in these three related fields as well as the means of obtaining the optimum in satisfaction.

We, as a nation, are particularly health-minded as long as we can get that health by purchasing certain elixirs, pills, and tonics. When it takes some effort on our part, we are not quite so interested. We say that we are interested in the physical fitness of our boys and girls, yet recent surveys show that we trail Europe in our success. We say that we are community-minded and believe in a wholesome recreation program for both our school and community, yet we do not even begin to spend the amount of money or give the attention to our overall recreation program that are provided by nations of Europe which have recently been devastated by war.

We should restudy our needs in health, physical education, and recreation and make a more concerted effort not only to publicize our findings but also to see that they are translated into action. In this connection, we should set up certain philosophies and guideposts, or working theses, to which we can subscribe. For instance, I believe that man cannot be at his best either socially, occupationally, or militarily without being physically fit; that man cannot attain the optimum of happiness and mental stability without being physically fit; and that, as Dr. Alexis Carrel holds, mental processes condition physical fitness and vice versa and that we function as a whole, not as individual parts. The whole child goes to every class, not the body to the gymnasium and the mind to the academic classes, as some teachers would have us believe. Modern education is too expensive to pour into an unsound body. We should attempt to make the individual physically fit before subjecting him to formal education or to develop physical fitness simultaneously with his formal education. School activities should be practical and of a nature that can be carried over into adult life. Recreation, as a means for overcoming some of the excess fatigue from the tensions of everyday living, is definitely a part of our Western life.

Now that we have exposed some of our philosophy, let us turn to the task of the administrator whose job it is to translate this philosophy into a workable program. Probably the first step is to make a general survey of the community. By this survey we should determine or learn some facts about the dietary, health, and recreation habits of the children, as well as the types of general physical exercise and work in which

children participate. Do the children come from low, average, or high income families? Do they come from city, village, or farming areas? Is there a tendency toward certain physical disabilities or certain health problems in the region? In years past it was frequently thought that there was some correlation between the family income and the diets of the children, but his does not necessarily have to be so. It is rather surprising that in some farm areas we find children who lack meat or eat too much salt pork or too many pancakes. We also find children who have been "pulled out of shape" by carrying heavy loads continuously. The school physician, school nurse, physical education teacher, homemaking teacher, agriculture teacher, guidance director, attendance supervisor, and officials of various types of welfare agencies can all participate in this survey. When all the results of the survey are tabulated, there should be a basis of material for the development of the future program in health, physical education, and recreation.

Another step in organizing the program is to have a medical examination of the pupils. All the individual work and advice, either of a regular or corrective nature, should be based on this yearly medical examination. The physician should take plenty of time to give a thorough examination, the boys being stripped to the waist and the girls wearing halters. It would be extremely desirable to have a physical education teacher and a nurse present to aid in the examination and to fill in the necessary records. At this time the physician can prescribe many of the activities, exercises, and types of recreation that he wishes each pupil to take. Certainly he would not prescribe violent exercise and many types of recreation for a youngster having any one of a variety of heart problems.

In addition to the general examination, it is desirable to have screening audiometer and screening vision tests, and to carefully retest those screened out as having defects. Sometimes it is desirable to follow the general audiometer test with a pitch range audiometer test. If thought desirable, the medical examination can be followed by various physical tests to determine the physical fitness index of the pupil. Rather than for pupils to compete with one another for high physical fitness index, this suggests that the pupil should gain satisfaction in raising his own index by making himself more healthy or physically fit.

The making of all of these examinations and the taking of all these tests is a waste of time unless the results are used, so I wish to emphasize, please use this information.

Another important thing is to form a committee, call it a physical fitness committee, a health committee, or anything else you wish--it could even be the same committee suggested for the survey. It certainly should include the physician, the nurse, the physical education teachers, the grade supervisors, the cafeteria manager, the dietician, the science teachers, the homemaking teacher, the principal, and the superintendent, and it might well include a board member, the county nurse, the county nutrition worker, and a welfare officer, as

well as the recreation director. It might also be desirable to have members of the P.T.A. and other types of organizations in the community on this committee.

The main function of the committee should be to think through the problems of health, physical education, and recreation and to make suggestions or draw up a master plan for a program in all phases. For instance, in one community that I was associated with, this health, physical education, and recreation committee paid particular attention to the study of the diets of the children. This resulted in the preparation of better menus in the school cafeteria, with mimeographed menus sent home to the parents along with other school news. Thus the parents had some idea of what was to be served at school and were better able to prepare a more balanced meal at home for the children, or to prepare supplementary lunches if the children took their lunches to school. Many times recipes for the dishes on the menus were placed on this mimeographed sheet. Through the advice of the committee, no candy or soft drinks were sold during school hours. The nutritional part of the homemaking curriculm was developed by the committee, as well as the health section of the science program, both elementary and high school. Thus, the program had its very foundations laid in positive education on nutrition for the entire community, so theory was actually carried out in a community-wide basis.

Through the efforts of this committee the health program became a practical everyday experience which permeated the entire program day after day. People became more or less health conscious--good health became something to enjoy, it was positive, creative, and exhilarating.

The regular physical education program can be divided into athletics, physical education classes, and correctives. All phases of the program should be under the direction of the physical education department. In too many schools the so-called physical education program consists mainly in developing boys' interscholastic teams, which make up only a small group compared to the total school population and certainly do not deserve the proportion of time, effort, and money spent on them. More attention should be given by the administrator to the promotion of intramural sports, with emphasis on broadening participation. There are many types of games which can have a carry-over into adult life. If bowling is a recognized sport in adult recreational life, why not promote it in schools? If swimming is a recognized sport in adult recreational life, there is no reason why it should not be promoted in our schools. Swimming pools are rather inexpensive compared to what they formerly were, and it would not be a difficult job to incorporate a small swimming pool in every elementary school.

Recent newspaper releases indicate that we are becoming a nation of watchers rather than of doers. This has many sad implications both in physical fitness of the individual and in preparedness in the defense of our country. A physical education teacher should be one of the most important teachers

in the school system. He or she comes in very close contact with the pupils in an informal manner and can give considerable guidance, not only for health and physical well-being, but also for social and moral well-being. Some pupils need rest and relaxation on a cot instead of physical exertion in the gymnasium or on the playgrounds. Some need to walk out in the sunshine; others are able to play rather strenuous games. Of course, the type of exercise should depend entirely upon the recommendations of the physician and the nurse. Every pupil should be provided one period of physical education every day, and no pupil should be excused from this period. It is as fully important to meet the obligations of the time set aside for this period as it is to take an examination, or to go to the laboratory, or to have a study period. Many things can be said about setting up the physical education program. Since they have been said quite well by the former speakers, I will not go into the merits or demerits of any particular phase of the program.

The corrective portion of the program consists of doing certain exercises on special apparatus. Most of the apparatus used to correct specific defects is rather inexpensive, and much of it can be made at the school. Persistency on the part of the pupils and frequent medical check-ups will work wonders. No school can afford to be without some type of corrective program.

To set up and implement a good health, physical education, and recreation program it is necessary that the administrator actually believe in the program and put his heart into it, not merely as a matter of advertising the school but primarily because he believes in at least some of the philosophies stated at the beginning of this article. He must see the program in its proper perspective and provide the time, personnel, and money for the program. Too many times in scheduling classes he has taken people out of the study hall for assignment to physical education. Frequently these people have nothing in common except that they are either males or females. Tremendous differences in age, physical abilities, health problems, and many other things tend to make these groups among the most heterogeneous in the school system. Not only that, but large classes are common with little help or assistance provided for the teacher. Too little attention has been given to the planning of the school building for health, physical education, and recreation. The administrator has taken plenty of time to see that the gymnasium is large enough to seat the crowd, but he has given too little time and consideration to the health suite, the rest area, proper showering facilities for physical education classes, corrective apparatus, and many other items necessary for good health and physical education programs. Too many times he is at fault in closing the school building early in the afternoon, and keeping it closed Saturdays, Sundays, and holidays when it might better be used for good wholesome recreational purposes for both pupils and adults.

It is quite important that good publicity be given to the over-all program. This does not mean in terms of games won and lost, but in the aims and objectives of the programs, in how it is proposed that these be achieved in what has

already been done and what is to be done in the community. Much can be done through personal contacts with the parents, the enthusiasm of the pupils themselves, public demonstrations in the evenings, and newspapers. Weekly articles written by pupils, physical education teachers, and others on the committee are frequently excellent for educating the public. No matter how good a program a school may have, it will not be 100 per cent effective unless the community is is well informed. Probably one of the most important but least thought out parts of the entire program is the annual report to the board of education. This should be comprehensive and in a language that the average man can understand. It should be in such a form that comparisons can be made with previous reports. Failures as well as successes should be reported. Suggestions for the following year should be incorporated, and a general over-all picture of the physical fitness, the health, and the recreational needs of the community should be included.

As mentioned earlier, this topic is too vast to be treated comprehensively in a short article. Effort has been made only to stimulate the thinking of the administrator, to get him to think through the whole program of health, physical education, and recreation more thoroughly, and to try to get more people to cooperate and set up a good program on a community-wide basis. Health is valuable and cannot be purchased; it requires understanding and effort. Likewise, physical education is necessary for good physical and mental health. Certainly recreation is one of the foundations of health, whether it is physical or mental, for it actually recreates in our body those conditions necessary for good health. And last, life without good health can be boresome, unproductive, and, in too many cases, socially dangerous. The administrator has a tremendous responsibility, and only as he is willing to open his mind and accept this responsibility can the program be properly implemented.

THE FACILITIES NEEDED FOR HEALTH, PHYSICAL EDUCATION, AND RECREATION PROGRAMS

The Elementary Level

David L. McCooe, Jr.

We learn by doing and we learn by sharing. We are fortunate that our state universities give us the opportunity to do both in this conference on facilities. We share our own experiences with those who attend and contribute their wealth of experiences. By so doing we add to the information we already possess.

Thanks to the forward visions of our past and present superintendents and school boards, the New Albany schools are able to boast of a program of health and physical education which is ever in a state of growth and improvement. Our local community recreation program, which utilizes school facilities, is at present growing in size and stature with a recent and present program of growth and development. Though our schools may be far from ideal, based upon the information at our command, they rank above many in facilities in the programs concerned in this conference. In order to maintain this status we must continue to grow in this regard, especially since there are such great numbers of children who will have to be accommodated in the future as school enrollments increase.

There are certain premises upon which we must agree in discussing facilities in health, physical education, and recreation: (1) A defined program in health, physical education, and recreation is both desirable and needed in the communities in which we serve; (2) multiple use of facilities is applicable and necessary to avoid duplications which are too costly to advocate; (3) facilities must be of sufficient size to accommodate all for whom they are constructed; (4) they must contain all additions and construction features needed to insure a broad, comprehensive program; (5) all areas must be easily accessible to those who plan to use them; and (6) all restrictions of use by any group must be based upon sound educational philosophy.

It is my opinion that the facility needed in this area would be one primarily for health and special services which are at present available in many schools. It would encompass a room area in which the following services could be given to the students of the school:

1. Medical and physical examinations
2. Dental examinations
3. Vision testing
4. First aid
5. Nursing service
6. Speech and hearing therapy

It would include storage space, restroom facilities, and wash basin and would be so constructed as to make it a quiet area. It should be located to provide easy access without major disturbances to the usual educational program of the school it serves.

Physical education. The program of physical education which exists, or does not exist, is due in some measure to the existence or lack of existence of adequate facilities for the promotion of a balanced and comprehensive program of instruction to the elementary child. In some instances, the lack of programming, especially in the smaller systems, is due in part to the lack of qualified leadership. It seems that both are necessary and are integral parts of the program if it is to achieve any significant degree of success. Our emphasis is on the first apparent lack in these areas in many locations.

Certain guides for facility planning in physical education should be kept in mind in discussing our needs:

1. Since physical education is an integral part of the total educational process, teaching class space must be provided in which to conduct an instructional program.

2. There exist in all areas of the curriculum certain minimum facilities which are necessary for the successful presentation of a worth-while program.

3. The type, extent, and kind of facilities supported by any community are determined by the type of program to be offered, the number to be served, and the ability and desire of the school corporation to provide needed teaching spaces.

4. The principle of multiple usage of areas and facilities should be considered where fund limitations and good common sense indicate the necessity for multi-purpose areas.

5. The facilities should be self-contained, so that they may be successfully segregated from the school building as a whole.

6. Provision for multiple use by several groups in most instances can best be made by the use of partitioning which would permit a large area to be separated into many smaller areas.

7. Permanent structures which cut down on total floor space usable for instructional purposes should be kept at a minimum.

8. The functional design of the school plant should be predicated upon its use as an education-community center.

9. A balance between indoor and outdoor areas is highly desirable.

It appears to me that the minimum type of facilities which we should advocate are the following:

1. Gymnasium-auditorium
2. Toilets
3. Lockers
4. Showers
5. Folding bleachers
6. Folding partitions
7. Storage space for equipment
8. Playroom (two standard size classroom areas)
9. Outdoor play spaces
    a. Grassy area
    b. Hard top surface

The last mentioned areas would be situated so that different grade or age level play areas could be separated. They would be used for class-skill instruction, after-school recreation, noon-time recreation, and intramural sports. The others would be used for the same purposes, but to a lesser degree in the case of recreation.

Recreation. Of the three types of recreational areas recognized as desirable for a community (neighborhood, district, and regional centers) the neighborhood center should coincide with the elementary school, the district center with the junior or senior high school, and the regional center with the established park and community recreation areas.

The elementary school best coincides with the neighborhood center because both are designed primarily to serve the younger children, and because it is within a reasonable walking distance from the homes of the children it serves. The needs of the groups served by the neighborhood center and the elementary school are sufficiently similar to make it possible to use the indoor and outdoor facilities planned for the school program to provide the all-year-round recreational program. Fortunately, few, if any, additional facilities over and above those usually provided in a well rounded and well planned school building are needed to take care of the recreation needs of the public to be served. The school facilities most commonly used for recreational purposes are the gymnasium, its auxiliary facilities, auditorium, cafeteria, music rooms, and art and crafts facilities. As in the case of commonly used physical education spaces in well planned structures, all potential recreational areas should be located so as to assure easy access and so arranged as to be able to be "self-contained," so that the use of the entire structure in which they are located would not be necessary.

If we are to continue to progress and retain what ground we have already gained in the educational picture, we must stand for greater opportunity to achieve the objectives we have established for our profession. One avenue of this achievement is in the provision for adequate, well-planned facilities in which to work.

The Junior High School Level

Dale E. Brock

There are many forms of junior high school organization in existence. In this discussion I will confine my ideas to that type of junior high school which consists of grades seven, eight, and nine which are entirely or almost entirely departmentalized. I will have in mind a junior high school with an enrollment of approximately 700 pupils. The health, physical education, and recreation facilities needed for this type of junior high school could be divided into two general categories--the outdoor facilities and the indoor facilities.

Outdoor facilities. Before designing the outdoor spaces for education and recreation it must be determined whether the facilities are to accommodate merely the school involved or whether consideration is to be given to the educational and recreational needs of the entire community. To provide recreational opportunities for individuals of all ages will require larger areas than are now provided on most school properties. A minimum of 25 acres is needed to serve the instructional and recreational needs of a junior high school of 700 pupils and the surrounding community. This would serve as a playground for the immediate neighborhood and provide a landscaped park-like area as well as space for the normal activities of a junior high school program.

Areas where direct supervision is important should be located in close proximity to the building. Areas for field games may be further removed, but should be easily accessible from the building. The areas allotted to girls' games should be so arranged as to avoid crossing the boys' section. Topography will be a determining factor in the arrangement of the over-all plan. Natural features quite frequently dictate where landscaped areas shall be. Where areas are limited, multiple use may be necessary to conserve space. A judicious placement of all permanent fixtures will tend to facilitate multiple use. Safety should not be overlooked in the designing stage. The placement of apparatus in protected areas, the location of entrances and paths for safe ingress and egress, the allocation of adequate space for the field games, and many other safety measures will reduce the possibility of accidents.

For a junior high school of 700 pupils, I would suggest a minimum of 75,000 square feet of hard-surfaced areas which would include two regulation-sized basketball courts with permanent backstops, four to six tennis courts, and a roller skating rink. The balance of the paved area could be for multiple use of volleyball, badminton, and similar games. If the community idea prevails, an apparatus area should be included to provide adequately for the needs of a neighborhood playground.

This area should contain a minimum of 300,000 square feet, to provide ample area for games to be played on standard dimension courts of junior high size. Since boys' activities require larger areas than girls', it would be expected that

more space would be allocated to the boys' field area. Through the multiple use of these areas the boys' section would include baseball, softball, football, or touch football; while archery, field hockey, soccer, and softball would more than likely be included in the girls' section. A cinder track for junior high track activities would be highly desirable. If a complete oval is impracticable, consideration should be given to only a straightaway capable of the 50-yard dash event.

The utilization of the natural features on the site, the planting of trees and shrubs around the edge of the grounds and between game areas will give a park-like appearance and contribute to the beauty of the entire area. Trails, nature centers, strolling areas, and picnic areas could easily be incorporated in the landscaping plans.

Indoor facilities. The extent of indoor facilities to be provided in a junior high school depends somewhat upon the philosophy of community use, just as it does with the outdoor area. If the recreation needs of all in the community are to be included with the instructional and recreational needs of the junior high school, then it goes without saying that the recommendation for number, size, type, and location of rooms would be materially affected. However, where so-called good community-school programs are now in effect, I believe it has been the usual practice to limit the indoor physical education and recreation facilities to the needs of the school enrollment and thereafter to extend the facilities so provided to the entire community.

A gymnasium for physical education in a junior high school (grades 7 through 9) should be of sufficient size to provide for one official junior high school basketball court with ample safety zones. A floor space of 65' x 100' would provide this, and by means of a folding partition it would provide two classrooms. Four badminton courts, three volleyball courts, or two small unoffical basketball courts could be provided for in this area. Spectator space may be desired, and, if so, appropriate provision should be made.

No less than one dressing locker room suite for boys and one for girls must be provided for every school. Provision should be made for ample dressing space, lockers, showers, toweling service, toilets, lavatories, and storage in each suite. Sometimes an average of 14 square feet per pupil during a peak period is used as a basis for determining space requirements in a dressing room.

In addition to the gymnasium, there may be one or more auxiliary physical education teaching rooms, depending upon how extensive a program is contemplated. These auxiliary teaching rooms may be standard classroom units or units with special characteristics, such as an apparatus room or a wrestling room, or facilities for such activities as bowling, archery, riflery, and swimming. All of the auxiliary rooms should be separate teaching situations where classes can be carried on simultaneously. In some cases auxiliary rooms may be so arranged for multiple use--an example, the wrestling room can be provided for

in the apparatus room if ample storage space is accessible for the wrestling mats. Not too many of the auxiliary type rooms will be found in junior high schools, and it might be hard to justify them unless they are to be utilized in a community-wide program. Each of the auxiliary rooms with special characteristics requires its own set of specifications.

In planning a health unit for use by a junior high school, consideration must be given to facilities for both health service and health education. The health education classrooms should be very similar to the regular classrooms. In addition to the normal requirements of any classroom they should contain a wash-basin with hot and cold water, and a roll-away bed. Perhaps there would be some advantage to locating the health education classrooms near the health service unit, although I do not consider this as essential. The health unit certainly should be free from excessive noise. This is essential for hearing tests and for accurate medical examinations. The minimum which should be included in a junior high school health service unit is the nurse's office, the examining room, a dressing room (which can be an area in the examining room), a waiting room, and the rest rooms. A dental room is highly desirable. Some place within the unit spaces should be provided for cots on which students may rest if sick or injured. The number of such spaces depends upon the size of the school.

Generally speaking, it has not been considered the responsibility of school boards to provide for the total community recreational needs. The school's function with regard to facilities for recreational purposes has been in a supplementary role. Facilities which were planned primarily for instructional purposes in a junior high school may also serve to meet some of the recreational needs of the community as a whole. These may be divided into activities which are physical, cultural, social, or creative in nature. The rooms which may accommodate groups for recreational purposes are the shops, music rooms, home economics rooms, arts and crafts rooms, library, assembly hall, cafeteria, science laboratories--in fact, almost any type of room in a school would be a potential recreational facility for the right type of group.

Conclusion

The entire community should be given consideration when planning and designing health, physical education, and recreation facilities of a junior high school for either the indoor or outdoor activities. Space allocations and locations of the various facilities play an important role in the utility and safety of the program. The extent of the health, physical education, and recreation program depends upon the philosophy of those whose responsibility it is to provide the facilities for the program.

The High School Level

Outline of speech by George P. Farkas

1. Consideration should be given to the over-all high school site before getting into specific facilities.

   The concept of a compact multi-story building versus the new ideas in building planning was reviewed.

   The trend toward acreage allotments rather than the foot per student standard for various high school needs was discussed. It is not unusual for school sites today to have 40 acres or more. Dr. M. L. Engelhardt has indicated that 350,000 square feet are necessary for outdoor space for physical education and recreation for both boys and girls. He has also recommended an additional 64,000 square feet for activities needing paved area. In acreage, this would mean about nine and one half acres.

2. The high school has a responsibility in educating for leisure.

   Many high school graduates enter adult society handicapped with a minimum of leisure skills. With the predicted reduced work week, high schools should assume several functions in preparing students for adult life. These are: (1) organize to develop leisure skills, (2) provide a school environment to develop these skills, (3) permit teachers to educate for leisure, and (4) increase cooperation with community agencies.

3. Many factors determine the type and size of indoor facilities.

   Because of many varied needs in various communities, general rather than specific recommendations were made for the following:

   a. One gymnasium should be provided for each 500 pupils enrolled.

   b. If the total enrollment is over 700, there should be two gymnasiums, one for girls and one for boys.

   c. Separate gymnasiums are preferable to one gymnasium which is divided by some sort of partition.

   d. Folding type bleachers should be installed so that the full floor space can be used for intramural and recreational purposes.

   e. The suggestion was made that present basketball floor needs be adapted to physical education and recreation for all.

4. The gymnasium should be located where it can have a convenient public entrance.

5. Cooperative planning between architects and physical educators is necessary to insure adequate facilities.

Locker and shower rooms should be sufficient in quantity to handle peak class load, plus 10 per cent for increased enrollment. The combined storage and dressing locker arrangement was recommended. Passage from the locker room to gymnasium and outdoor facilities was reviewed.

One shower head was suggested for each four students during the peak load. Gang type showers are satisfactory, except that approximately 10 per cent of the girls' showers should be individual in type. Small rooms for the storage and distribution of towels should be adjacent to the shower and locker rooms.

6. Other facilities should not be overlooked.

a. There should be two separate offices for men and women teachers of physical education, with adequate facilities.

b. Disagreement among authorities about providing home and team dressing rooms for athletic purposes was discussed. However, schools having an interscholastic program should have such facilities.

c. The need for storage and drying rooms for physical education and athletic equipment is important.

7. School health facilities should be provided.

The types of environmental factors such as lunchroom, drinking fountains, and toilet facilities, were reviewed. The modern health instruction classroom-laboratory was described with suggestions for equipment. The type, location, and services of the health service unit were covered.

8. The modern program of physical education includes swimming.

The recommendation was made that an indoor-outdoor type of pool adjacent to the high school building be financed jointly by the school and recreation department. The year-round use of such a pool was discussed. Indiana schools have a long way to go in developing swimming as a part of physical education, and leaders in the field must consider this facility seriously.

9. High school indoor facilities should be used for recreation.

Many existing facilities in the high school can be used for a community recreation program. These were mentioned by name.

10. Conclusion

More and more the fields of health, physical education, and recreation will have a greater contribution to

make to the well-being and culture of our people. The joint planning by all community groups involved is a necessity. Progress in securing needed facilities will not be a reality until we secure this cooperative effort.

The Out-of-School Level

Harry Davidson

The need for expanded facilities for health, physical education, and recreational activities at the out-of-school level is great at the present time and will become greater as we move into the shortened work week. At the same time, there is a tremendous squeeze on the tax dollar as the competing agencies, local, state, and national, endeavor to get their fair share to provide the many services that are needed in a nation with an expanding economy and growing population. The tremendous growth in the federal budget has left a smaller share of the tax dollar for local communities. As the local citizen's taxpaying ability approaches the maximum, particularly in regard to the property tax, it also makes them more conscious and critical of expenditures at the local level, expenditures which are more evident to them and subject to their direct control.

For this reason, and the fact that it is otherwise good business to do so, it is imperative that all community facilities be coordinated as far as possible as we plan youth and adult programs. The facilities of the YMCA and YWCA, the Boy Scouts, the schools, the city government, the churches, and every other agency should be coordinated as far as possible in their use to reach common objectives. While the use of these can hardly be expected to be controlled through a coordinating committee, due to the diversity of ownership, there can be some common planning. For example, in Battle Creek one of the churches uses its recreational facilities for an excellent program of teaching dancing and social graces to different age levels, including individual and class instruction for grade school, junior high, and senior high school groups, and for adults. As the over-all coordinating committee looks at the total picture, this fact certainly affects at least the extent, if not the nature, of the program of the other agencies.

Following this philosophy, in Battle Creek we have two very important coordinating agencies. One is an adult committee with actually no official status, but one that represents the many agencies interested in this topic. It has proved to be a very effective group. In its over-all planning, it has been influential in getting the city to remodel its Youth Building to handle this program more efficiently. It has discovered that many of our so-called youth programs, such as that of the YMCA, were too much adult-centered, and it has brought about changes giving better balance. It has helped and encouraged the school and city officials to plan effectively and economically their joint building, playground, and park facilities.

Even more important, this adult coordinating committee has brought into existence a coordinating committee of teenagers who plan their health, recreation, and physical education programs. This committee has been very effective and has had the full backing of the many youth groups, and the reports from the Probate Judge and other agencies that have access to statistics show a decrease of 40 per cent in juvenile delinquency in this

county as far as the courts are concerned.

Carrying this idea on to use of all community facilities, I am a strong advocate of the use of school buildings and grounds around the clock if necessary. School buildings are never worn out; they become obsolete. A school building used during the past 50 years would be in practically the same condition today had it been used 16 hours a day instead of the customary six to eight hours a day. It is also possible to allow hundreds or even thousands of students to use a gymnasium daily for a variety of activities and still keep it in satisfactory condition for the dozen or more inter-scholastic games each year.

In Battle Creek we are not only using all of the existing school buildings and facilities for the out-of-school program but we also plan new facilities very closely with the City Recreation and Planning Department. A new elementary school, on about a four-acre site, was built adjacent to the city park with 20 acres of beautiful lawns, trees, and play areas.

The school is now planning a new junior high school with a site of 15 acres adjacent to a proposed city park of 40 acres. The proposed city park is a new undeveloped area, and the co-operative planning will include football fields, tennis courts, track, and parking areas to be used jointly by the school and the city. In planning the new building for joint use, we make certain that the school provides an outdoor drinking fountain which can actually be in an exterior wall of the building and enclosed by a steel door when not in use and that it also provides an outside entrance to the school toilet facilities.

For after-school and evening activities, about the only difference in our planning is the proper location of corridor gates to segregate the evening activities from the rest of the building. It is also necessary and practical to have the heating system divided according to areas of use.

In our elementary buildings, we have provided blacktop basketball courts, which were somewhat strange to Michigan a few years ago, but now we find the students clearing the snow off to use them even during the winter. These blacktop areas get a variety of other uses, including outdoor square dancing by youth and adult groups. During the winter months, they are sprayed and used for ice skating.

Our present junior high schools, in addition to the usual facilities, have swimming pools and tennis courts. The tennis courts were built during the past year with the City Recreation Department, the schools, and the Parent-Teacher Associations each bearing a third of the cost. Again, as soon as the school program ends in late afternoon, the City Recreation and Planning Department moves in with youth and adult programs using the pools constantly and until 10:00 p.m. each evening, all day on Saturday, and with a full schedule during the summer months.

The new junior high school plant will include a golf practice green, driving range, and band shell, along with the usual outdoor facilities.

It is not a one-sided arrangement as far as the school is concerned. The school uses the Youth Building during the day. The schools also use the city parks for their hard ball program.

In the duplicate use of school facilities, there is always the question, "Isn't there some damage to school property?" One would be very naive not to expect some routine wear and tear in a program this large. Since the buildings are being used by the same taxpayers and citizens, we hold to the same standards for evening supervision and care as we do during the day. In other words, if there is malicious damage during the day, steps are immediately taken to repair the damage and to alleviate the condition that brought it about. We expect some normal wear and tear in our daily school activities. The same thing applies to out-of-school activities, and we find, with that kind of an attitude, principals will expect a few minor irritations and take them in stride as they see the total program in operation and its great help as the community and school work together toward common objectives.

HIGHLIGHTS OF ROUND TABLE DISCUSSION ON FACILITIES[1]

MR. HIGGINS: We have had a series of presentations covering health, physical education, and recreational facilities. This presents a large field for our panel to cover. I would like to introduce our panel. They are as follows: Eugene L. Brown, Architect, Indianapolis; Edward D. James, Architect, Indianapolis; Ralph Legeman, Architect, Evansville; Harold V. Maurer, Architect, South Bend; William F. Mueller, Assistant Superintendent in Charge of Buildings and Grounds, School City of South Bend; and Harold Silverthorn, Director of Buildings and Properties, School City of Gary.

At this time I would like the members of the panel to express their thoughts on any point brought up so far or any other point in regard to facilities. Following this we will give members of the audience an opportunity to ask questions of the panel.

MR. SILVERTHORN: In my experience, I have found that we must begin the question of facilities with our knowledge of child growth and development. We must look at the interests and needs of children; we must appraise and evaluate the way a child grows, how he learns, what his interests and needs are. If facilities do not fit in with child growth and development, I seriously question whether we should keep them.

I am a displaced Hoosier, coming back into the state last year after a number of years in other states. I was a little disappointed by some of the buildings in Indiana. Many were 40 years out of date before they were built. This is of real concern to me, because I saw much real progress on the West Coast and in other parts of the country. I wonder whether this is due to complacency on the part of some people in our state, or whether we are putting the necessary money into school construction.

I heard many comments this morning about basketball in Indiana. I believe that, in our physical education program, we need to take a highly critical look at basketball. We need to ask ourselves whether the emphasis on basketball is desirable in physical education.

MR. MAURER: I would like to refute some of the things said by Mr. Silverthorn. In defending my colleagues here, I am one of those "guilty" of the 40-year-old situation. The main reason for it is lack of money for school facilities in Indiana. Indiana spends little money for school purposes when compared with other states on a percentage basis. In consolidation, where we once were one of the leading states, we now have to take a back seat. In rural areas the money for extensive building programs is not available.

---

[1]In order to conserve space, many of the remarks have been paraphrased and shortened.

So far, the significance of this conference as I see it is that Americans are going to have a lot of leisure time in the future, and this needs to be recognized in our planning. It may be that we are already doing some good planning for leisure time--when I see large gymnasiums, swimming pools, music rooms, shops, and the like, going into our schools, I think that our planning may not be too bad. Planning large gymnasiums may be doing something for many communities. We are able to interest the parents, brothers and sisters, and so on, in coming into the school building. In this way we are doing something for the leisure time activities of these people.

I think we need not apologize for the physical education facilities we are putting into school buildings today. Recreation and physical education are very important, and I think we are doing something about them.

MR. LEGEMAN: I would agree with many of the things said by Mr. Maurer. Large gymnasiums are the major meeting places and provide good entertainment for the various communities.

On a visit I recently made to the West Coast, I found many communities taking advantage of natural conditions in planning school buildings. I was interested in their classrooms. These were often constructed with no corridor, but with an outside door into each classroom. Rest rooms were gang-type. They didn't spend much money for gymnasiums, or even for lunchrooms. Some lunchrooms were outdoor picnic areas. I admired these people very much for the use they made of climate. However, I found many practices behind those in use in Indiana.

In the Middle West, I know of few bond issues for schools which have passed in the last 60 days. People are getting very tax conscious, and are worried about expenditures.

In planning facilities, I think we need to consider two very important questions: (1) Does the facility improve teaching, or the educational result? (2) Since everything today is custom-built to fit the local situation, does the facility fit the community?

MR. HIGGINS: Safety is an important aspect of our problem. Would a panel member care to discuss this phase?

MR. JAMES: In thinking about safety, I believe a great need today is for better city planning in regard to schools. This is as important as the planning of streets. By careful city planning, we should be able to locate a primary school so that the children do not cross a street on their way to school. Intermediate and high schools should be planned with a minimum of traffic hazards. This problem is serious in Indianapolis, where children are being killed because of the lack of city planning.

I have spent some time in the last month with the head of an architectural society from Japan. In that country they have an association of school, recreation, and park facilities under a single head. This makes the overall planning situation much more efficient.

I don't like the term "leisure time." TV is a good example of "leisure time" activity, and it is clear that we don't develop ourselves by this type of thing. Facilities should be so located that people can take advantage of them in "available" time, not "leisure" time.

In Indianapolis, our firm is designing a small grade school located on one half of a city block. How can we take care of the safety of these children in a congested area? We wanted to put this building on stilts--we ended by putting a two-foot grass strip in front of the building and paving the rest of the area. The parking area here will create a great safety problem.

MR. MUELLER: In South Bend we purchased 18 to 20 acres of land for each new site. Since the war we have cooperated with the park board on the use of this land. A line is drawn dividing each new site approximately in half. The park board then develops its half of the site into recreational facilities, such as tennis courts, football and baseball field, playgrounds, and so on. The school develops its half into landscaped area, blacktopped area, and the like.

In addition, our Assistant Superintendent in Charge of Business is a member of the City Planning Commission. We have two school board members on the Recreation Committee. I think we have a fine, cooperative system for developing areas for school and recreational use.

School buildings are used four nights a week by adults and children, and are also in use Saturday mornings.

Our elementary buildings have as much as 5,400 square feet for gymnasiums, seating up to 400 spectators. In addition, each has a stage.

MR. BROWN: Our firm often remodels and adds to old buildings. The rural areas of Indiana don't have sufficient money to replace old buildings. Remodeling, therefore, is often their only solution to building problems.

In Indiana, the architect often comes in at the last moment. The site has already been selected, and the overall sum of money to be expended is already decided upon. If the people involved--parents, officials, and educators--would put more faith in the architect, we would get a type of architecture entirely different from the kind we are getting today.

School building architecture in Indiana is a very controlled thing. It is difficult to get the building you

want. I feel the architect should be let into the program early. Let him fight for the site and facilities. Safety in facilities is an extremely important thing, and I sometimes feel that some local people do not give enough consideration to the problem of safety in school buildings.

Standardization is guiding Indiana school building programs as I see them. I run into this problem in 50 per cent of my jobs. People want a new building similar to the old, and they don't want the architect to improve on it. I've added to or remodeled every type of building made, and never yet have I had a completely free hand to design a building.

MR. SILVERTHORN: What is needed is the development of a set of educational specifications from the school people. The educators must define the framework within which the architect can design with freedom.

In regard to remodeling, I have found that it often costs more to do a complete remodeling job than to build a new building.

Question and Answer Period

MR. HIGGINS: In beginning the question and answer period, I would like to ask one in regard to ventilation. How can we improve ventilation in physical education facilities? What about the use of ozone lamps?

MR. SILVERTHORN: I believe that a recent research found very little beneficial effect from ozone lamps.

MR. MAURER: A major problem of architects is how to determine whether new fads will work. We put mechanical ventilation into a school building a few years ago, and the principal did some research among a number of other schools which had no mechanical ventilation. He found the children's health to be as good there as in the school we designed. However, we're still putting in ventilation the way the State Board of Health requires.

MR. SILVERTHORN: I believe we need to spend a percentage of our funds in research in these new areas, the way in which industry does.

DR. BOOKWALTER: Our research has found that in schools where facilities are good, the physical education program is good. If the buildings people will continue fighting for minimum standards in size, and so on, good programs should follow.

MR. LEGEMAN: I fought for better standards long before many Indiana minimum standards were in existence. I'd like to refer to the so-called "extra" facilities in schools. For example, I know of a school which included in its plans an

individual concrete play area outside each self-contained classroom. They then instituted a survey to determine whether such an area could be justified educationally, and as a result it was cut off the building. The teachers couldn't justify it.

QUESTION: Could we have some comments on the multipurpose room?

MR. SILVERTHORN: There are too many purposes for any one multipurpose room. Possibly we need to divide this space so that play activities can be going on in both areas. I think it is a mistake to throw all of the space into the same room. In Gary we're also making use of movable stages, and find them very satisfactory.

When we make compromises, we make mistakes. We must believe in our program, and then sell it to the people. People will spend money if they know what it is being spent for. We may find that we are criticized for <u>not</u> advocating high-class health facilities.

MR. LEGEMAN: I feel that the combination of physical education and lunchroom facilities in the same room is undesirable.

MR. SILVERTHORN: I agree that this combination is not good. I believe that a combination physical education room and auditorium in a multipurpose room is desirable, but I would not include a cafeteria in addition.

MR. HIGGINS: In visiting schools, I have found all three combined: auditoriums, gymnasiums, and cafeterias. I sometimes wonder whether the room is any of the three in the final analysis.

QUESTION: How do architects feel about movable or folding bleachers?

MR. MAURER: We had the opportunity to install the largest installation of movable bleachers in the largest high school gymnasium in the world. These bleachers are very satisfactory, although somewhat uncomfortable. The best argument in favor of them is the multiplicity of the use of space. In the noon hour at the North Side Gymnasium in Elkhart, I recently observed the following activities going on at the same time: basketball, tennis, social dancing, golf driving, shuffleboard, and rhythmics. This variety of activities was made possible by the use of folding bleachers.

QUESTION: This question has to do with safety. One company is trying to sell "bomb-shelter" school buildings. What is your thought on this?

MR. SILVERTHORN: I think if you'd take this problem to a competent engineer, he would find that these buildings would not withstand the force of an atomic bomb. Radiation, ventilation, and the like present great problems.

MR. MUELLER: In South Bend we have many schools with plenum chambers, and these look much like bomb shelters. The ventilation problem would be a very great one. Another phase of this would be electricity. Electric generator salesmen are trying to push generator sales for bomb shelter use in our area.

DR. SEAGERS: I can see little use for bomb shelters in our schools in this area. Ventilation problems are too great. Also, we would probably have enough time to get the children home in event of an attack. Bomb shelters are a problem for cities as a whole, not for schools.

MR. JAMES: In England, during the war, my experience in bomb shelters was that lack of oxygen was the big problem. The answer to the bomb today is not shelters. We simply cannot protect ourselves from the hydrogen bomb.

QUESTION: Is it possible to build a high school gymnasium and auditorium combination which is efficient?

MR. JAMES: No.

COMMENT: I would agree that you need to get architects in the planning earlier. If various supervisors in the school system would have an opportunity to sit down with architects in the planning earlier, we would have much safer school buildings.

MR. SILVERTHORN: In community planning, you must involve people of intelligence who will study, and you also must train them.

QUESTION: If buildings planned in the past have been "atrocities," and planned by one man, shouldn't we get the physical education people to help the architect in planning?

MR. JAMES: The poorest job I've ever done was one in which I had a free hand. The architect needs a definite plan for his structure, not in design, but in function. I think it's extremely important that we recognize the difference between a functional plan and a floor plan.

MR. LEGEMAN: I agree with Mr. James. Thirty-one years ago, the architect had to provide free sketches. If you made an innovation you lost the job. I'm thankful that today the occasions when this comes up are few and far between.

If the architect were brought in soon enough, he could help solve many problems. Many teachers have good ideas, and I think it's important for an architect to sit down with the whole staff and analyze their ideas, keeping those that are good and throwing out those that are bad. This is one thing which, when done, has greatly improved school buildings.

MR. MAURER: In a nearby city, the staff was asked what it

wanted in a new high school building. All requirements were worked out by committees. These were screened by the administrative staff, and then the architect developed sketches. Every teacher had some good ideas. An important outcome of this was that the teachers had the feeling they had been consulted. They felt that they had had a part in the planning of the building.

MR. SILVERTHORN: I believe in cooperative planning. I have the feeling that we need also to evaluate the building after it is completed.

MR. MAURER: Teachers should visit other buildings before consulting with their own architect.

MR. BROWN: In the small community, as in the large, we need to get the ideas of all the teachers. Personal contact between architect and teacher is a good thing.

MR. SILVERTHORN: One reason for the so-called "lag" in building design--the reason we can't go ahead and do what we would like to do--is that teachers often won't accept new ideas.

In the matter of flexibility, for example, we're building schools with free span from outside wall to outside wall. We're installing teaching walls, or cabinet walls, from floor to ceiling so that they can be changed easily. Sometimes its hard to get teachers to accept these ideas. I think our greatest problem is how to approach these teachers, so that they will accept new ideas and be willing to try them out.

DR. SEAGERS: The following points would seem to summarize our conference this year:

(1) It has been established that we need good educational leadership.

(2) We need good experimentation and research. We need to dare to try new ideas.

(3) We need some real evaluation of our buildings, in such a manner that it can be used in future construction.

(4) The Health, Physical Education, and Recreation group at Indiana University is doing an outstanding job.

(5) We are doing a fairly good job in the field of physical education facilities, but we must not be satisfied.

BULLETINS IN THE FIELD OF EDUCATION
INDIANA UNIVERSITY

The Bulletin of the School of Education, Indiana University, was first published in 1924 and has appeared regularly since that time. A complete list of the bulletins may be obtained from the School of Education upon request. The studies included in the present and in the two volumes immediately preceding it in date are listed below. Unless otherwise indicated, these may be obtained for $1 each from the Indiana University Bookstore, Bloomington, Indiana.

Volume 31 (1955)

1. Eberle, August William, A Brief History and Analysis of the Operation of the Educational Placement Service at Indiana University, 30 pp.

2. Lynch, William W., Jr., An Approach to the Study of Motivational Problems in Education, 48 pp.

3. Proceedings of the Third Statewide Conference on the Fifth Year in Teacher Education, 69 pp.

4. Watson, Carlos M., and Richey, Robert W., Present Practices and Trends in the Preparation of Elementary School Principles at the Graduate Level, 54 pp.

5. Indiana and Midwest School Building Planning Conference: Proceedings, 149 pp.

6. Crawford, Mary M.; Steinkamp, Stanley; and Houswald, Edward L., Student Spending at Indiana University, 1951-1952, 82 pp.

Volume 32 (1956)

1. Hoppe, Arthur, Students Help Improve the Curriculum in Indiana, 55 pp.

2. Schmidt, Louis G., Two-Year Evaluation of the Internship in Guidance Program at Indiana University, 67 pp.

3. Strom, Ingrid M., Teaching Load of Teachers of English in Indiana, 63 pp.

4. Hughes, Otto, and Schooler, Virgil E., A Survey of Athletics in the Secondary Schools of the North Central Association, 52 pp.

5. Indiana and Midwest School Building Planning Conference: Proceedings, 58 pp.

6. Barr, W. Monfort; Church, Harold H.; and McGhehey, Marion A., Trends in School District Reorganization in Indiana 116 pp.

Volume 33 (1957)

1. Kapos, Ervin; Mech, Edmund V.; and Fox, William H., Schoolroom Motivation: I. Two Studies of Quantity and Pattern of Verbal Reinforcement as Related to Performance on a Routine Task, 46 pp.

2. Kapos, Ervin; Mech, Edmund V.; and Fox, William H., Schoolroom Motivation: II. Two Studies of Quantity and Pattern of Verbal Reinforcement as Related to a Measure of Drive on a Routine Task, 42 pp.

3. Rufsvold, Margaret I., and Hart, Adele, Secondary School Library Personnel and Standards in Indiana, 58 pp.

4. Hoppe, Arthur, The Core in Junior High School, 44 pp.

5. Dvorak, Earl A., Review of Research in Business Education, 104 pp.

6. Indiana and Midwest School Building Planning Conference: Proceedings, 50 pp.